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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,226	01/17/2002	Patrice Hamcau	T2146-907703	2631
181	7590	06/06/2006	EXAMINER	
MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			PARTHASARATHY, PRAMILA	
			ART UNIT	PAPER NUMBER
			2136	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,226

Applicant(s)

HAMEAU ET AL.

Examiner

Pramila Parthasarathy

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication filed on 04/12/2006. Claims 1 – 10 were cancelled. New claims 11 – 20 were filed.

Claim Objections

2. Claim 20 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Independent Claim 17 recites, "An embedded smart card system comprising computer data processing means and storage means". Dependent Claim 20 recites, "The system according to Claim 17, wherein said embedded system is a smart card". Dependent Claim 20 does not further limit the subject matter of the independent claim 17, on which Claim 20 depends on.

3. The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description (See § 1.58(a).)

Where the nature of the case admits, as in the case of an improvement, any independent claim should contain in the following order:

- (1) A preamble comprising a general description of all the elements or steps of the claimed combination which are conventional or known,
- (2) A phrase such as “wherein the improvement comprises, ” and
- (3) Those elements, steps, and /or relationships which constitute that portion of the claimed combination which the applicant considers as the new or improved portion.

Independent Claims 11 and 17 do not have the separation of the phrase “...comprising:” separating the limitations with the preamble, specifically “:” (**emphasis added**).

Specification

4. The amended title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The specification discloses that the invention relates to a method for securing a typed data language, particularly for an embedded microchip system (see instant specification pages 1 – 18 paragraph [0001 – 0024]). The amended title “METHOD AND EMBEDDED SYSTEM FOR IMPLEMENTING AND SECURING A TYPED DATA LANGUAGE IN A COMPUTER SYSTEM”, does not reflect that the invention is for securing a typed language, particularly for an embedded (microchip) system.

A computer is not always an embedded system. Amendments to the specification are not entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 11 – 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As per claims 11 – 20, citing claim limitations as the secure execution of an instruction sequence representing a computer executable instructions, that is, descriptions or expressions of such a program and that is, descriptive material per se, non-functional descriptive material, and is not statutory because it is not a physical “thing” not a statutory process, as there are not “acts” being performed. The specification does not provide how these instructions are stored in a computer or a data storage device.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11 – 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document.

Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP 608.01(i)-(p). The individual limitations have not been indented not are separated to understand the amended new claims 11 – 20.

7. Claim 11 and 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 17 recite the limitation "**the** secure execution" (**emphasis added**), in line of the respective claims. There is insufficient antecedent basis for this limitation in the claim.

Response to Arguments

8. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the **pending** claims (**emphasis added**), explaining how the claims avoid the references or distinguish from them.

Applicant's arguments filed 4/4/2006 have been fully considered but they are not persuasive. Examiner points out that Applicant, in response to the previous office action, cancelled claims 1 – 10, yet, Applicant argues Schwabe does not teach the instant invention as claimed in Claim 1 and that the claims are patentably distinguishable from Schwabe. Examiner also points out that Claims 11 – 20 are pending and are examined in this office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 11 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwabe (U.S. Patent Number 6,651,186).

10. Regarding Claims 11 and 17, Schwabe teaches “an identifier allowing, during the execution of said instruction sequence, an interpreter of a computer system, particularly an embedded microchip system, to identify a type of said typed data and identifier in a first series of given locations in a memory of said computer system (Column 14 line 58 – Column 15 line 45 and Column 16 lines 28 – 65),

wherein said interpreter generates, based on said identifier, additional data called type information elements, associated with each of said typed data, and stores or updates said type information elements in a second series of given storage locations corresponding one-to-one with the first series of given storage locations, in order to specify the type of these typed data (Column 14 line 58 – Column 15 line 45 and Column 16 lines 28 – 65),

and in that during the execution of a sequence of instructions of predetermined types, said interpreter performs a continuous verification, prior to the execution of each of the predetermined instructions, of the matching between a type indicated by the instructions and an expected type indicated by said type information elements stored in said second series of storage locations, so that said execution is authorized only when there is match between said types (Column 16 lines 28 – 65 and Column 19 line 18 – Column 20 line 45).

11. Claim 12 is rejected applied as in rejecting Claim 11 . Furthermore, Schwabe teaches wherein each of said type information elements comprises a string of bits stored in storage locations of said second series that correspond to one-to-one with storage locations in said first series in which said associated typed data are stored, and the configuration whereof represents one of said types of typed data (Column 14 line 58 – Column 15 line 45 and column 16 lines 8 – 65).

12. Claim 13 and 18 are rejected applied as in rejecting Claims 11 and 17.

Furthermore, Schwabe teaches a variable number of levels depending on the instruction, each level constituting one of said storage locations, said typed objects are stored in at least a first elementary stack called a data area and a second elementary stack called a local variable area (Column 14 line 58 – Column 15 line 13 and Column 15 line 60 – Column 16 line 28),

and in that said type information elements are distributed into two additional elementary stacks that correspond one-to-one with said first and second elementary stacks, in order to specify the type of said associated objects stored in said data and local variable areas (Column 14 line 58 – Column 15 line 13 and Column 15 line 60 – Column 16 line 28).

13. Claim 14 is rejected applied as in rejecting Claim 11 . Furthermore, Schwabe teaches when there is no match, the execution of said instruction sequence is interrupted and replaced by the execution of instructions corresponding to pre-programmed security measures (Column 19 line 42 – Column 20 line 27).

14. Claim 20 is rejected applied as in rejecting Claim 17 . Furthermore, Schwabe teaches embedded system is a smart card (Column 6 lines 20 – 36 and Column 18 lines 15 – 43).

15. Claims 15 and 19 are rejected applied as in rejecting Claims 13 and 18 .

Furthermore, Schwabe teaches type information elements stored in said second series or storage locations are associated with additional information elements that determine the size of said storage locations in said stacks storing said typed data (Column 17 lines 23 – 50).

16. Claim 16 is rejected applied as in rejecting Claim 13 . Furthermore, Schwabe teaches type information elements are associated with additional information elements called flags, in order to mark said objects that are associated with them and to indicate whether they should be saved in said stacks or can be erased (Column 17 lines 12 – 37 and Column 23 lines 9 – 61).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the


shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. to 5:00p.m.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pramila Parthasarathy
May 24, 2006.




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